Patent claims

1. A rotation body for a printing machine, comprising a stator (1) and a rotor (2) which can be rotated relative to the stator (1) and comprises at least one permanent magnet (7), characterised in that at least one stator winding (3) is provided in the stator (1) such that, when current flows through the stator winding (3), a torque acting on the rotor (2) can be generated in interaction with the at least one permanent magnet (7) of the rotor (2).

2. The rotation body according to claim 1, wherein at least two stator windings (3) are provided at axially offset points on the stator (1).

3. The rotation body according to claim 1, comprising one or more stator windings (3) which are provided to the stator (1) such that a magnetic field for driving the rotor (2) can be generated over at least half the length of the rotor (2).

4. The rotation body according to claim 1, wherein one or more stator windings (3) are provided, distributed approximately over the entire length of the stator (1).

5. The rotation body according to any one of the preceding claims, wherein one or more stator windings (3) are provided on the outer surface of the stator (1).

6. The rotation body according to any one of the preceding claims, wherein the rotor (2) is a cylinder shell.

7. The rotation body according to any one of claims 1 to 5, wherein the rotor (2) is a cylinder body comprising a blind hole.

8. The rotation body according to any one of the preceding claims, wherein the rotor (2) is mounted on the stator (1) and/or on an external retainer (10) by a bearing (6a, 6b).

9. The rotation body according to any one of the preceding claims, comprising a cylinder body or roller body (9) which is supported on the rotor (2) and in particular fixed by a non-positive frictional and/or positive lock.

10. The rotation body according to any one of the preceding claims, comprising a cooling system (4) for cooling at least a partial area of the stator (1).

11. The rotation body according to any one of the preceding claims, wherein the permanent magnets (7) connected to the rotor (2) are annular and/or rod-shaped and/or are provided on the rotor casing inner surface.

12. The rotation body according to any one of the preceding claims, wherein the rotor (2) is a deflecting cylinder, a drawing roller, a ductor, a central cylinder or steel cylinder, a printing blanket cylinder, a form cylinder or plate cylinder, a rubber cylinder, a knife cylinder, a collecting cylinder and/or a cutting cylinder, an inking roller and/or dampening roller and/or is used in the folding apparatus or in the reel changer.

13. A printing machine drive, comprising a rotation body according to any one of the preceding claims.

14. The printing machine drive according to the preceding claim, comprising a control device (5) for controlling the voltage, the strength of the current and/or the frequency of a current flowing in at least one stator winding (3) and/or comprising an angle sensor (8) for measuring the rotary position of the rotor (2).

15. A rotation printing machine, comprising rubber blanket cylinders and counter printing cylinders thereto for forming printing points, and comprising plate cylinders (2) which are combined in pairs with the rubber blanket cylinders into cylinder groupings by a mechanical coupling for driving them, wherein each cylinder grouping is driven by a plate cylinder and/or rubber blanket cylinder designed as a rotation body according to any one of claims 1 to 12 and/or the counter printing cylinder is driven by another driving motor or is designed as a rotation body according to any one of claims 1 to 12.

16. The use of a rotation body according to any one of claims 1 to 12 as a bearing for a cylinder or a roller (9) of a printing machine.